

Course Sequence
Joint Honours in Computer Science and Mathematics

1st YEAR (30 credits)

		<u>Session</u>	<u>Prerequisite</u>
ITI1120	Introduction to computing I	Fall	
MAT1320	Calculus I	Fall	One of MAT1339, Ontario 4U Calculus and Vectors (MCV4U) or an equivalent.
MAT1341	Introduction to Linear Algebra	Fall	MAT1339 or Ontario 4U Calculus and Vectors (MCV4U), or an equivalent.
ENG1112	Technical Report Writing	Fall	
Free elective		Fall	
ITI1100	Digital systems I	Winter	
ITI1121	Introduction to computing II	Winter	ITI1120
MAT1325	Calculus II and an Introduction to Analysis	Winter	MAT1320
MAT1348	Discrete Mathematics for Computing	Winter	
Free elective		Winter	

2nd YEAR (33 credits)

		<u>Session</u>	<u>Prerequisite</u>
CEG2136	Computer architecture I	Fall	ITI1100
CSI2110	Data Structures and Algorithms	Fall	ITI1121, MAT1348
MAT2122	Multivariable Calculus	Fall	(MAT1325 or MAT1322), (MAT1341 or CEGEP linear algebra with MAT1341 as corequisite)
MAT2141	Linear Algebra I	Fall	MAT1341
MAT (2000) – List ¹		Fall	
CSI2101	Discrete Structures	Winter	MAT1348
CSI2120	Programming Paradigms	Winter	CSI2110
CSI2132	Databases I	Winter	CSI2110
CSI2911	Professional Practice in Computing	Winter	
MAT2125	Elementary Real Analysis	Winter	MAT1325 or MAT2122 or (MAT1322, MAT2362)
MAT2143	Algebraic Structures	Winter	MAT1341

¹ 9 credits of electives from {MAT2324, MAT2355, MAT2362, MAT2371, MAT2375}

3rd YEAR (27 credits)

		<u>Session</u>	<u>Prerequisite</u>
CSI3105	Design and Analysis of Algorithms I	Fall	CSI2110, CSI2101 or for honors mathematics students: CSI2110, (MAT2141 or MAT2143)
SEG2105	Introduction to Software Engineering	Fall	ITI1121
MAT (2000) – list ¹		Fall	
MAT (2000) – list ¹		Fall	
Free elective		Fall	
CSI3104	Introduction to Formal Languages	Winter	CSI2101 or MAT2143
CSI3131	Operating systems	Winter	CEG2136, CSI2110
CSI/SEG (3000) – list ²		Winter	
Elective (MAT 3000)		Winter	

¹ 9 credits of electives from {MAT2324, MAT2355, MAT2362, MAT2371, MAT2375}

² 3 credits from the following list: {CSI3130, CSI3140, CEG3185}

4th YEAR (30 credits)

Elective (CSI 4000)
Elective (MAT 3000)
Elective (MAT 4000)
Elective (CSI, SEG
3000)
Free elective
Elective (CSI 4000)
Elective (MAT 3000)
Elective (MAT 3000)
Elective (MAT 4000)
Free elective

Session

Fall
Fall
Fall
Fall
Fall
Winter
Winter
Winter
Winter
Winter

Prerequisite